



## Centsable 45 mm Contactor Specifications

# 45 MM CENTSABLE CONTACTOR SPECIFICATIONS

## 45mm Centsable Contactor Specification Guide

Insulation Voltage	AC	(V)	600 Volts AC			
Ampere Rating	Max. ILE Amps (AC3) <sup>note 1</sup>	(A)	9	12	16	25
	AC1 Thermal Current (800V) <sup>note 2</sup>	(A)	30	30	40	45
Maximum Power (hp) of Three-Phase Motors	200V	(HP)	2	3	3	7.5
	230/240V	(HP)	3	3	5	7.5
	480/480V	(HP)	5	7.5	10	15
	575V	(HP)	7.5	10	15	20
Maximum Power (hp) of Single-Phase Motors	115V	(HP)	5	5	1	2
	230/240V	(HP)	1	2	3	3
Maximum Power (kW) of Three-Phase Motors ACS Category <sup>note 1</sup>	230/240V	(kW)	2.2	3	4	6.5
	400V	(kW)	4	5.5	7.5	11
	440/480V	(kW)	4.7	6.4	9	12.5
	500V	(kW)	5.5	7.5	10	11
	690V	(kW)	5.5	7.5	7.5	11
Short Circuit Protection Fuses Class J-UL Rated Fuses	Type 2 Coordination <sup>note 3</sup>	(A)	20	25	32	40
Auxiliary Contacts Electrical Capacity			A600 <sup>note 4</sup>			
Coil Voltage Operating Limits			A.C. Pick-up 85-110% rated control voltage / A.C. Drop-out 20-75% rated control voltage			
Average Coil Power Requirements / Coil Current (A) = VA/Coil Voltage			A.C. Pick-Up (VA) 80-100 / A.C. Sealed (VA) 9-12			
Power Factor			Pick-up .65 / Sealed .35			
Coil Operating Time at Rated Coil Voltage			Pick-up (mS) 10-25 / Drop-out (mS) 6-18			
Maximum Operating Frequency (No-Load Operation)			3000 operations / hour			
Mechanical Durability			10,000,000 operations			
Electrical Durability			1,000,000 operations			
Operating Ambient Temperature			-25 to +55C (-13 to +131F)			
Electrical Protection Degree			IP20 (IP10 for power entry cables)			
Mounting			Screw or 35mm DIN rail			
Wire Sizes	Line / Load		10 AWG		8 AWG	
	Control & Auxiliary Contacts		#12-#14 AWG (stranded recommended)			

## Notes:

1. ACS type loads consist of squirrel cage three-phase motors.
2. AC1 non-inductive or slightly inductive loads. Typically resistive loads (i.e. furnaces, heaters, etc.)
3. Type 2 coordination is a protection category for IEC 60947-4-1. Section 8.2.5.1 specifies that Type 2 coordination requires that, under short circuit conditions, the contactor or fuse cause no danger to persons or installation and shall be suitable for further use. The risk of minor contact welding is possible.
4. A600 is a NEMA rating given to switching devices. The A600 rating in particular is 10 amp continuous thermal current with a maximum 60 amp make current and a 6 amp break current at 600 volts AC. Consult NEMA ICS 5-1993, Rev 1 Table 1-4-1 for more detailed specifications.

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# Cutler-Hammer Contactor Specifications

## 45 mm Cutler-Hammer CE15 Contactor Specifications

Insulation Voltage	AC	(V)	690 Volts AC				
Ampere Rating	Max.UL Amps (AC3) <small>note 1</small>	(A)	7	10	12	18	25
	ACT Thermal Current (600V) <small>note 2</small>	(A)	20	20	20	32	32
Maximum Power (HP) of Three-Phase Motors	200V	(HP)	1.5	2	3	5	5
	230/240V	(HP)	1.5	2	3	5	7.5
	480/480V	(HP)	3	5	7.5	10	15
		(HP)	5	7.5	10	15	20
Maximum Power (HP) of Single-Phase Motors	115V	(HP)	0.25	0.5	0.5	1	2
	230/240V	(HP)	0.5	1	2	3	3
Maximum Power (kW) of Three-Phase Motors AC3 Category <small>note 1</small>	230/240V	(kW)	1.1	1.5	2.2	4	5.5
	415/440V	(kW)	2.2	4	5.5	7.5	11
	500/550V	(kW)	2.2	4	5.5	7.5	11
	500V	(kW)	4	5.5	7.5	11	15
	600V	(kW)	1.5	2.2	4	5.5	7.5
Auxiliary Contacts Electrical Capacity			AC50 <small>note 4</small>				
Coil Voltage Operating Limits			A.C. Pick-Up 85-110% Rated Control Voltage / A.C. Drop-Out 20-75% Rated Control Voltage				
Average Coil Power Requirements / Coil current (A) = VA/Coil Voltage			A.C. Pick-Up (VA) 80-100 / A.C. Sealed (VA) 9-12				
Power Factor			Pick-Up .65 / Sealed .35				
Coil Operating Time at Rated Coil Voltage			Pick-Up (ms) 10-25 / Drop-Out (ms) 6-18				
Maximum Operating Frequency (No-Load Operation)			3000 Operations / Hour				
Mechanical Durability			10,000,000 Operations				
Electrical Durability			1,000,000 Operations				
Operating Ambient Temperature			-25 to +55C				
Electrical Protection Degree			IP20 (IP10 for GH15ET and GH15FT)				
Mounting			Screw or 35mm DIN Rail				
Wire Sizes	Line / Load	#10 - #14 AWG Stranded Recommended		#14 - #6 Stranded Recommended			
	Control & Auxiliary Contacts	#12 - #14 AWG (Stranded Recommended)					
Line/Load Tightening Torque	Nm (Inch Pounds)	7	7	7	15	15	

Notes:

- AC3 type loads consist of squirrel cage three phase motors.
- ACT non-inductive or slightly inductive loads. Typically resistive loads (i.e. furnaces, heaters, etc.)
- Type 2 coordination is a protection category for IEC 60947-4-1. Section 8.3.6.1 specifies that Type 2 coordination requires that under short circuit conditions, the contactor or starter shall clear the system or installation and shall be suitable for further use. The risk of minor contact welding is possible.
- AC50 is a IEC rating given to switching devices. The AC50 rating in particular is 10amps continuous thermal current with a maximum 60 amp make current and a 6 amp break current at 230 volts AC.

IEC 60947-4-1, Table 1-4-1 for more detailed specifications.

## Cutler-Hammer CE15 Series Contactor Part Numbers

IEC Frame Size	Cutler-Hammer Contactor Model	Part Number	Price	Number of Contacts			Coil Voltage and Frequency	Additional Contacts	
				Main	Auxiliary Contacts Included			Maximum Contact Block Arrangement	Type of Auxiliary Contact Block
					N.O.	N.C.			
45 mm	CE15AN	CE15AN4AB	\$38.25	4			110-120VAC 50-60Hz	Up to two auxiliary contact blocks may be added to CE15 contactors (one per side).	Side mount C32NGS3 (1 N.O. and 1 N.C.) C32NGS1 (1 N.O. and 1 N.C.)
		CE15AN4BB	\$38.25	4			220-240VAC 50-60Hz		
	CE15BN	CE15BN4AB	\$39.00	4			110-120VAC 50-60Hz		
		CE15BN4BB	\$39.00	4			220-240VAC 50-60Hz		
	CE15CN	CE15CN4AB	\$49.75	4			110-120VAC 50-60Hz		
		CE15CN4BB	\$49.75	4			220-240VAC 50-60Hz		
	CE15DN	CE15DN3AB	\$56.25	3	1		110-120VAC 50-60Hz		
		CE15DN3BB	\$56.25	3	1		220-240VAC 50-60Hz		
	CE15EN	CE15EN3AB	\$63.00	3	1		110-120VAC 50-60Hz		
		CE15EN3BB	\$63.00	3	1		220-240VAC 50-60Hz		
	CE15FN	CE15FN3AB	\$71.50	3	1		110-120VAC 50-60Hz		
		CE15FN3BB	\$71.50	3	1		220-240VAC 50-60Hz		

Note: Holding circuit contact(s) supplied standard is N.O. auxiliary contact block is mounted on the right-hand side. (On Sizes A-C, contact occupies fourth power pole position-no increase in width.)

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